

# Detection of NSE in Formalin-Fixed, Paraffin-Embedded Mouse Tissue

## **Reagent and Antibody Information**

[1X Wash Buffer](#)

[3% Hydrogen Peroxide](#)

[1% BSA Diluent](#)

[1X Citrate Buffer](#)

[DAB Chromagen](#)

[Hematoxylin](#)

### **Blocking Solution: Rodent Block M (Ready-To-Use)**

Biocare Medical  
Concord, CA 94520  
[www.biocare.net](http://www.biocare.net)  
1-800-799-9499  
Catalog # RBM961

### **Primary Antibody: Rabbit Polyclonal to NSE**

Abcam, Inc  
Cambridge, MA 02139  
[www.abcam.com](http://www.abcam.com)  
1-888-772-2226  
Catalog # ab5690

### **Negative Control Serum: Normal Rabbit Serum**

Jackson ImmunoResearch Laboratories, Inc.  
West Grove, PA 19390  
[www.jacksonimmuno.com](http://www.jacksonimmuno.com)  
1-800-367-5296  
Catalog # 011-000-001

### **Polymer Reagent: Rabbit-on-Rodent HRP-Polymer Detection**

Biocare Medical  
Concord, CA 94520  
[www.biocare.net](http://www.biocare.net)  
1-800-799-9499  
Catalog # RMR622

## **Staining Procedure**

Positive Control Tissue: Pancreas

Stain Localization: Cytoplasmic - islet cells

1. Deparaffinize and hydrate slides through the following solutions:

Solution	Repetitions	Time
Xylene	2 times	5 minutes
100% Ethanol	2 times	3 minutes
95% Ethanol	2 times	3 minutes
1X Wash Buffer	2 times	5 minutes

2. Quench endogenous peroxidase by placing the slides in 3% hydrogen peroxide for 15 minutes.

3. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

4. Heat-Induced Epitope Retrieval Using The Decloaker

Add 500 ml of distilled water to the pan inside the decloaker.

Place a full rack of slides into a Tissue Tek® container with 200 ml of 1X citrate buffer

(Insert blank slides into any empty slots in the rack to ensure even heating of slides)

Place the container stably inside the pan and decloak for 5 minutes. *Maximum Pressure* \_\_\_\_\_

Depressurize for 10 minutes.

Remove pan top and cool for 10 minutes. *Temperature Before Cooling Slides* \_\_\_\_\_

Rinse the slides in 2 changes of distilled water for 3 minutes each time.

5. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

6. Block with the Rodent Block M Reagent for 20 minutes at room temperature.

Lot # \_\_\_\_\_ Exp. Date \_\_\_\_\_

DO NOT RINSE SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY.  
ONLY WIPE EXCESS BUFFER.

7. Apply primary antibody at a 1:50 dilution. (Brain is stained at 1:100). Incubate for 1 hour at room temperature.

Lot # \_\_\_\_\_ Exp Date \_\_\_\_\_

For negative control slides, dilute the protein concentration of the normal rabbit serum to match that of the primary antibody. Make a 1:50 dilution from this normalized serum, and apply to the slides. Incubate for 1 hour at room temperature.

Lot # \_\_\_\_\_ Date Reconstituted \_\_\_\_\_

8. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

9. Apply the Rabbit-on-Rodent HRP-Polymer Reagent, and incubate for 30 minutes at room temperature.

Lot # \_\_\_\_\_ Date Reconstituted \_\_\_\_\_

10. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

11. Apply the DAB chromogen. Incubate in the dark for 6 minutes at room temperature.

(Add 1 drop of DAB per ml of substrate)

Lot # \_\_\_\_\_ Exp Date \_\_\_\_\_ New Kit: yes / no

12. Rinse the slides in tap water 3 minutes.

13. Counterstain with Harris Hematoxylin for 20 seconds.

14. Rinse the slides in tap water until water is clear.

15. Gently agitate slides in 1X Wash Buffer until the tissues turn blue.

16. Dehydrate through the following solutions:

Solutions	Repetitions	Time
95% Ethanol	1 time	3 minutes
100% Ethanol	3 times	3 minutes
Xylene	2 times	5 minutes

17. Coverslip

*Updated 02/24/12*